

U. S. Department of Agriculture

Alex Wetmore
Washington.
U. S. Biological Survey, D. C.
MEMORANDUM

OF

TRAVELING EXPENSES

If found please return
to above address

From April 20, 1911

To Sept. 9, 1911

Use this Memorandum; it will assist
you in making up your account.
Retain for future reference. : : : :

SUGGESTIONS TO TRAVELERS.

Don't exceed \$5.00 a day for meals, lodging, bath, and waiter fees, the latter not to exceed 30 cents.

Don't exceed 25 cents a day for porter fees on sleeping cars.

Don't exceed 10 cents for porter fees on parlor or chair cars.

Don't exceed \$1.25 a week for laundry; 20 cents for each additional day. Don't bring forward charges for laundry from previous account.

Don't exceed 10 cents for porter fees at stations or hotels.

Don't charge for hotel porter except on arrival and departure.

Don't exceed 10 cents for checking personal baggage.

Don't exceed 50 cents for transfer of self and 50 cents for transfer of baggage between hotels and stations.

Don't purchase railroad tickets when transportation requests can be used, unless distance is less than 100 miles. A charge for cash railroad or Pullman fare must show starting point and destination.

Don't incur ANY expense not covered by letter of authority.

Subvouchers must be taken for lodging, special transportation, personal services, express and freight shipments, and all purchases in excess of \$1.50.

Subvouchers for express shipments must show weight and contents of each shipment.

The signature to a receipt must agree with name at top of subvoucher. In case of an incorporated or nonincorporated company, the full name and title of signer must be given

Render accounts once a month; include all expenses incurred during the month; enter items in chronological order.

Always state date and hour of departure and arrival.

Give initials of railroad when cash fare is paid.

Always state time, distance, terminal points, and rate when stage, carriage, or other special transportation is used.

Enter waiter tips and street-car fares each day.

Designate meals on trains as "en route;" the point at which any other meal, not included in hotel subvouchers, is taken, must be shown.

Explain any apparent duplication of expense or any unusual expenditure.

A. ZAPPONE,

Chief, Division of Accounts, and Disbursing Clerk.

8-829

April 20, 1911

	Dollars.	Cents.
Breakfast -----		
Dinner -----		
Supper -----		
Lodging -----		
Pullman porter -----		
Waiter fees -----		
Hotel porter -----		
Station porter -----		
✓ Checking baggage -----		
✓ transfer chest to museum		
from express office		.50 ✓
40 mty 1/6 gauge shells		.40 ✓
1 bx wads 1/6 gauge		.20 ✓
1 card board 1/6 gauge		.10 ✓
needles 1 Pa.		.05 ✓
2 spools thread @ 5		.10 ✓
3 v. 8 rolls Kodak Films	3	.20 ✓
2 pencils		.10 ✓
2 lbs powder Alum		.40 ✓
1 Bot. Plant Catalog		.35 ✓
2 straps for Plant Press		.30 ✓

8-829

April 20

1911

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		

Checking baggage

600-32 cal. Ideal Brassell	6	00 ✓	S.V. 2.
200-primers No. 1		40 ✓	
200-16 gauge mty	1	90 ✓	
4 lbs 12 upport Smokeless	3	20 ✓	
2 bx 16 gauge wads		40 ✓	
3 lbs B.B shot		45 ✓	
25 lbs No. 12 shot	2	25 ✓	
2 spools thread		10 ✓	
1 pr needle		.05 ✓	
rope for chest		15 ✓	

8-829

April 25

1911

	Dollars.	Cents.
Breakfast		
Dinner in Kans. City	1	00 ✓
Supper	1	00 ✓
Lodging		
Pullman porter		
Waiter fees		20 ✓
Hotel porter		
Station porter		10 ✓
Checking baggage		10 ✓

transfer by house to depot

50 ✓

S.V. Ex. ass bagg acct govt equipment

3 25 ✓

Carfare to depot Lawrence

.05 ✓

Left Lawrence 8:15 A.M.

April 27. trans request 136388

issued for ticket Lawrence to

Seattle via C.B. & Q. G.M. 48.90

trans. request no 136389

for Pullman Kans. City to

Seattle. rate 11.00

8-829

April 26

1911

	Dollars.	Cents.
Breakfast -----		40
Dinner -----		85
Supper -----		95
Lodging -----		
Pullman porter -----		25
Waiter fees -----		30
Hotel porter -----		
Station porter -----		
Checking baggage -----		

8-829

April 27

1944

	Dollars.	Cents.
Breakfast		90 ✓
Dinner	1	00 ✓
Supper		95 ✓
Lodging		
Pullman porter		25 ✓
Waiter fees		30 ✓
Hotel porter		
Station porter		
Checking baggage		

8-829

April 28

1911

	Dollars.	Cents.
Breakfast		85 ✓
Dinner	1	00 ✓
Supper	1	00 ✓
Lodging		
Pullman porter		25 ✓
Waiter fees		30 ✓
Hotel porter		10 ✓
Station porter		
Checking baggage		
Car fare to Hotel		05 ✓
Arrived Seattle		
11:20 P.M.		

8-829

April 29

1911

	Dollars.	Cents.
Breakfast		60 ✓
Dinner		75 ✓
Supper		60 ✓
Lodging		
Pullman porter		
Waiter fees		30 ✓
Hotel porter		
Station porter		
Checking baggage		
Transfer bag. depot to		
Wharf		75 ✓
Storage on bag.	1	00 ✓
Car fare		20 ✓
S.V. Kodak films	4	40 ✓
S.V. " " "	2	00 ✓

8-829

April 30, 1911

	Dollars.	Cents.
Breakfast -----		60 ✓
Dinner -----		50 ✓
Supper -----		80 ✓
Lodging -----		
Pullman porter -----		
Waiter fees -----		30 ✓
Hotel porter -----		
Station porter -----		
Checking baggage -----		
car fare -----		20 ✓
3 days room @ 2.00 -----	6	00 ✓

Exp. acct for April 56.15
 Trans. reg. 136388 48.90
 " " 136389 11.00
116.05

Exp. acct allowed for 55.00

Total expense to 30th 114.90

May 1, 1911

	Dollars.	Cents.
Breakfast -----		65 ✓
Dinner -----		80 ✓
Supper -----		75 ✓
Lodging -----		
Pullman porter -----		
Waiter fees -----		30 ✓
Hotel porter -----		
Station porter -----		
Checking baggage -----		
car fare -----		20 ✓
note book -----		15 ✓

May 2, 1911

	Dollars.	Cents.
Breakfast		80 ✓
Dinner		80 ✓
Supper		65 ✓
Lodging		
Pullman porter		
Waiter fees		30 ✓
Hotel porter		
Station porter		
Checking baggage		
Carfare		20 ✓
		5
		25

8-829

May 3, 1911

	Dollars.	Cents.
Breakfast		60 ✓
Dinner		85 ✓
Supper		90 ✓
Lodging		
Pullman porter		
Waiter fees		30 ✓
Hotel porter		
Station porter		
Checking baggage		
Carfare		10 ✓
s.v. 3 days room rent (May 4)	6	00 ✓
		5
		24
		28

8-829

May 4, 19 11

	Dollars.	Cents.
Breakfast -----		75 ✓
Dinner -----		90 ✓
Supper -----		
Lodging -----		
Pullman porter -----		
Waiter fees -----		20 ✓
Hotel porter -----		10 ✓
Station porter -----		
Checking baggage -----		
oatmeal -----		15 ✓
bacon -----		10 ✓
S.V. boxes chest from wharf to wharf -----	1	50 ✓
transfer chest from wharf to hotel at Kirkland -----		25 ✓
carfare -----		10 ✓
ferry fare -----		10 ✓
Supper at Kirkland hotel -----		15 ✓
		27
		3

8-829

May 6, 19 11

	Dollars.	Cents.
Breakfast -----		
Dinner -----		
Supper -----		
Lodging -----		
Pullman porter -----		
Waiter fees -----		
Hotel porter -----		
Station porter -----		
Checking baggage -----		
cornmeal -----		25 ✓
laundry -----		65 ✓
salt -----		15 ✓

15
10

8-829

May 13, 1911

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		
Checking baggage		
Ferry to Seattle & return		20 ✓
Carfare		10 ✓
Lafin & Rand powder		75 ✓
Laundry		95 ✓

0
20 ✓

May 16, 1911

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		5
Station porter		5
Checking baggage		
Ferry to Seattle & return		20 ✓
carfare		10 ✓
S.V. Ammunition	41	85 ✓
bacon		35 ✓
fruit jars		55 ✓
30 lbs table salt		45 ✓

24
4

May 17

1911

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		
Checking baggage		
ferry Seattle return		20 ✓
2 lbs L & F. Smokes	1	50 ✓
carfare		10 ✓

0
8

8-829

May 19

1911

	Dollars.	Cents.
Breakfast		
Dinner	2	90 ✓
Supper		
Lodging		
Pullman porter		
Waiter fees		10 ✓
Hotel porter		
Station porter		
Checking baggage		
Board at Kirkland	12	00 ✓
trans. chest from hotel to wharf		25 ✓
from wharf to wharf	1	50 ✓
Car fare		20 ✓
candles		15 ✓
dinner in Seattle		
Supper on board		
fun points		10 ✓
laundry		20 ✓
Sailed at 2 P. M.		
laundry		10 29 ✓

8-829

May 26, 19

	Dollars.	Cents.
Breakfast -----		
Dinner -----		
Supper -----		
Lodging -----		
Pullman porter -----		
Waiter fees -----		
Hotel porter -----		
Station porter -----		
Checking baggage -----		
Laundry -----		60 ✓

May 31, 19

	Dollars.	Cents.
Breakfast -----		
Dinner -----		
Supper -----		
Lodging -----		
Pullman porter -----		
Waiter fees -----		
Hotel porter -----		
Station porter -----		
Checking baggage -----		
Board on Tahona to supper May 31 @ 2.00 -----	24	67 ✓

Expense account
turned in July 3 for 108.77

June 30, 1911.

	Dollars.	Cents.
Breakfast -----		
Dinner -----		
Supper -----		
Lodging -----		
Pullman porter -----		
Waiter fees -----		
Hotel porter -----		
Station porter -----		
Checking baggage -----		
rent on Camp outfit	20	00 ✓
board for thirty days @ 2.00	60	00 ✓
Total expense for June	80	75 ✓

July 2, 1911.

	Dollars.	Cents.
Breakfast -----		
Dinner -----		
Supper -----		
Lodging -----		
Pullman porter -----		
Waiter fees -----		
Hotel porter -----		
Station porter -----		
Checking baggage -----		
Laundry	1	20 ✓

July 3......, 19.....

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		
Checking baggage		
Board on Tahona		
3 days	6	00 ✓
transfer baggage		
wharf to room	1	00 ✓

July

July 11....., 1911.

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		
Checking baggage		
Board in Unalakleet 7 2/3		
7 2/3 days	12	75 ✓
Laundry	1	00 ✓
Groceries	23	05
	34	85
stove	6	50
room rent	3	00 ✓
mushin		10 ✓
axe	1	25
file (large)		25 ✓
stone pipe		90
hunting bag	1	00 ✓

July 18

, 19

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		
Checking baggage		
Laundry	20	70

July 31

, 19

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		
Checking baggage		
To Chief	30	00 ✓
board of July 11 to 31 20 1/2 days	27	11 ✓

C 40 00

Salary Camp assistant
at 45 per month

rental of camp outfit

at 10.00 per month

6.67 ✓

account rendered October 24

for

\$ 91.03

Aug 24, 19

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		
Checking baggage		
<i>To Elsie</i>	<i>36</i>	<i>00</i>
<i>Board</i>	<i>34</i>	<i>00</i>
	<i>32</i>	<i>00</i>
<i>laundry</i>		<i>1.10</i>

Aug 25, 19

	Dollars.	Cents.
Breakfast		
Dinner		
Supper		
Lodging		
Pullman porter		
Waiter fees		
Hotel porter		
Station porter		
Checking baggage		
<i>Left King's Cove</i>		
<i>5:00 a.m.</i>		

account rendered Oct. 24
for *77.35*

19

[illegible]

19

[illegible]

- 19

8-329

- 19

8—829

Sept 9

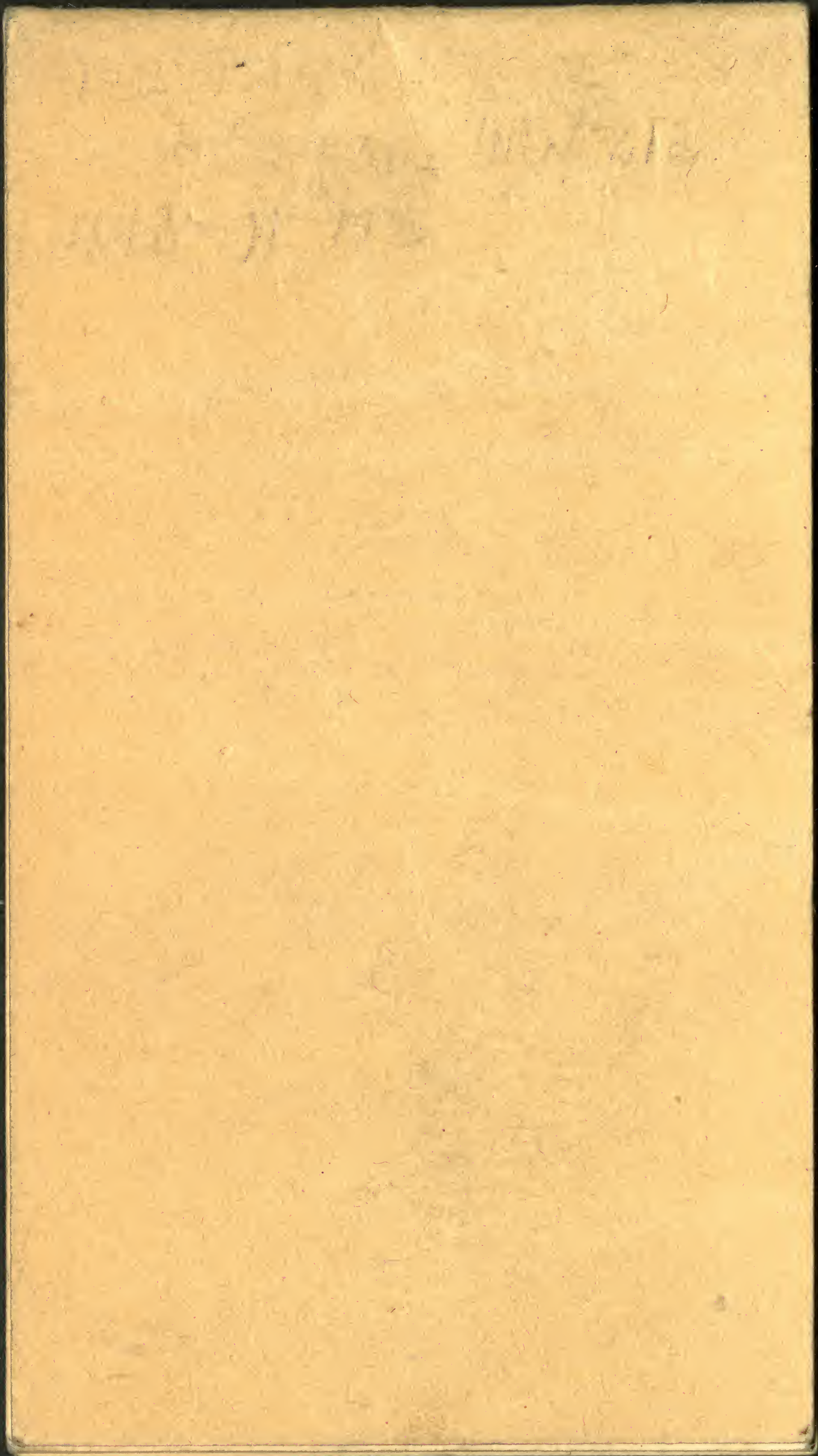
, 1911.

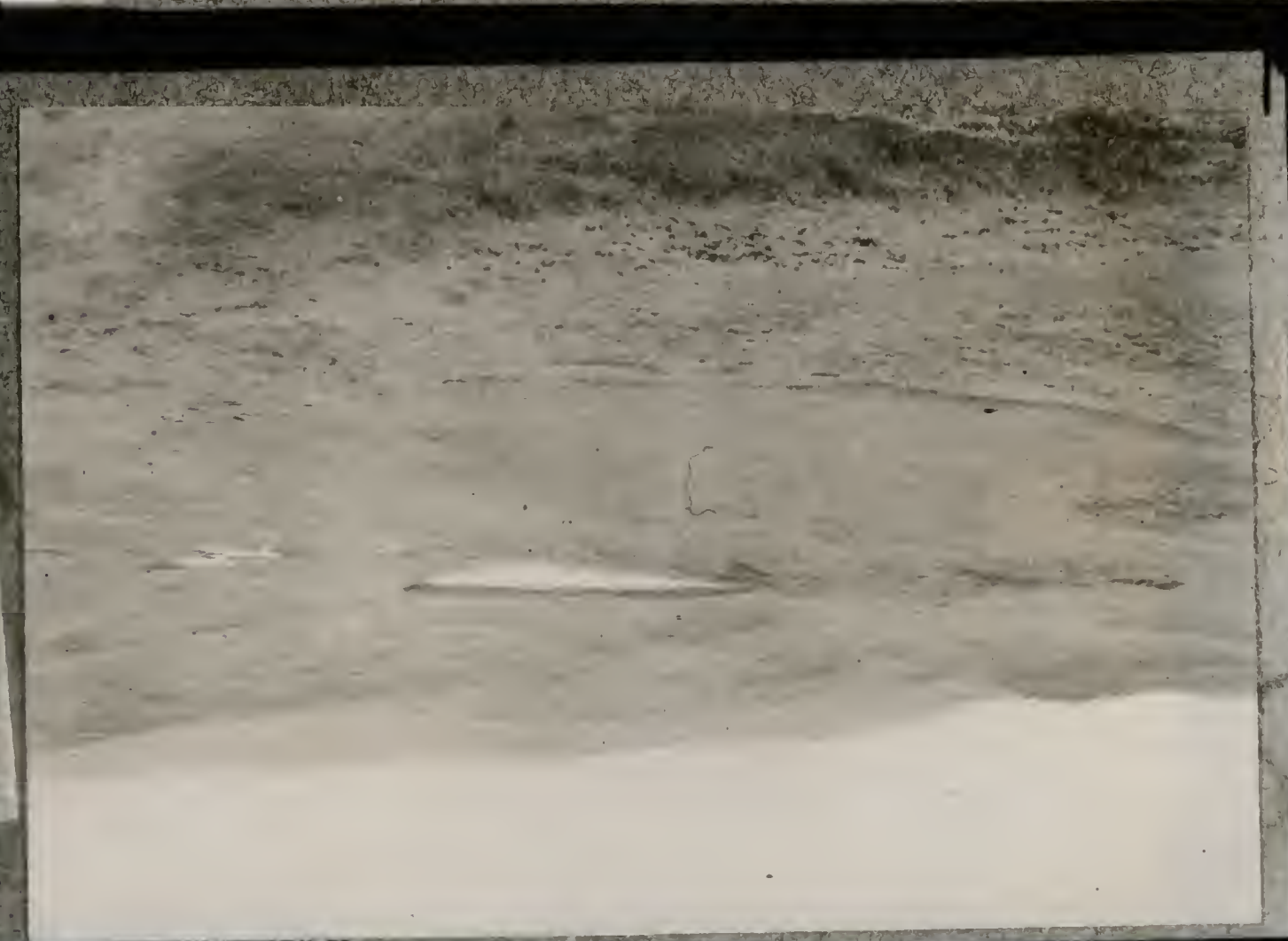
	Dollars.	Cents.
Breakfast -----		90
Dinner -----	70	
Supper -----	10	
Lodging -----		
Pullman porter -----		25
Waiter fees -----		20
Hotel porter -----		
Station porter -----		
Checking baggage -----		
arrived Lawrence 11:15 a.m.		
Carpfare -----		05
Transfer bag -----		75
Account rendered Oct 24		
for -----	55	95

8-829

paid 40 cents

Board on Patterson
 July 12 - 3 meals - Elsie
 " 13 - 2 " - 2 meals
 " 14 - 2 " - 2 "

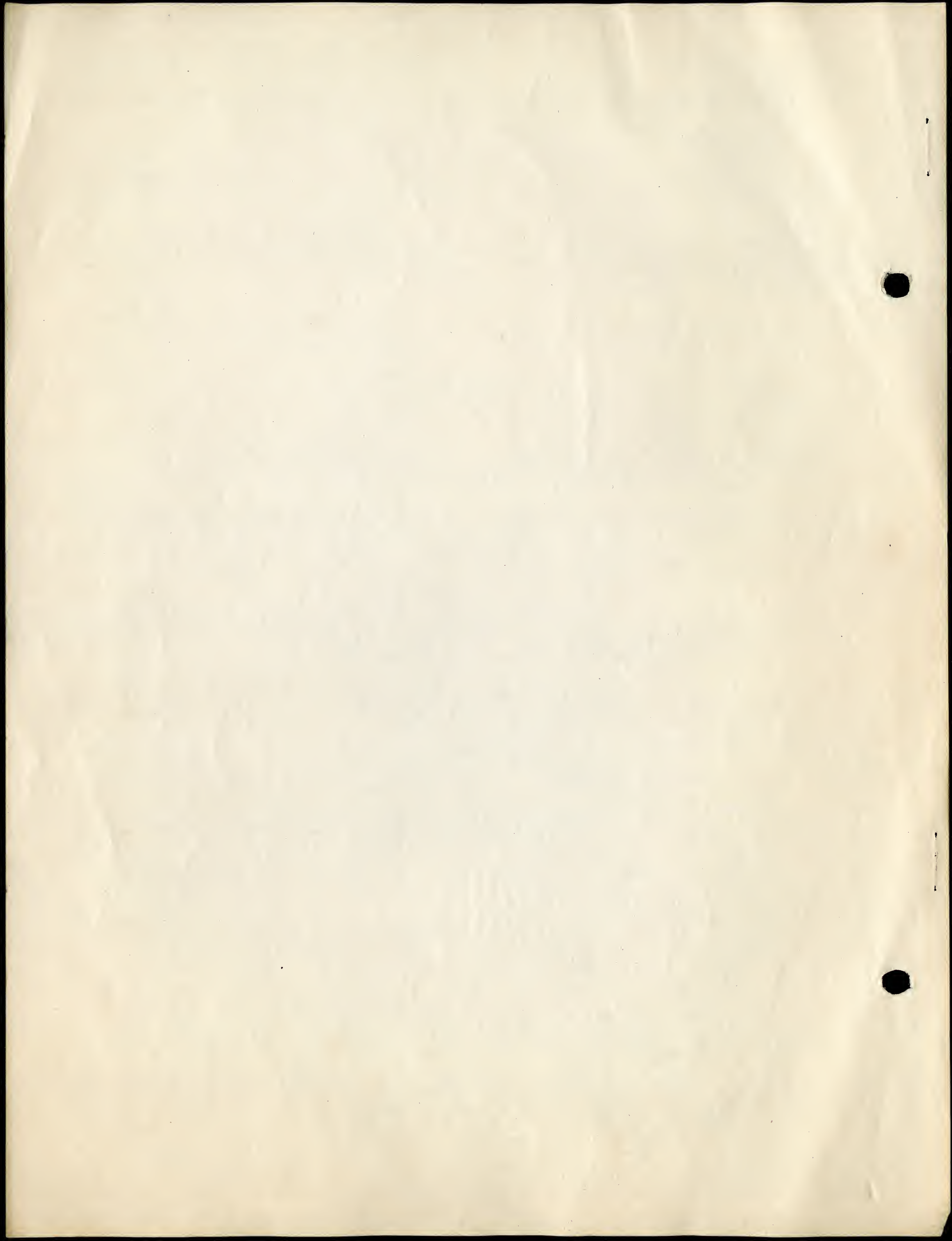




COUNCIL MEETINGS

DIVISION OF ECONOMIC INVESTIGATIONS

BUREAU OF BIOLOGICAL SURVEY



7
SECOND COUNCIL MEETING, DIVISION OF ECONOMIC INVESTIGATIONS

Bureau of Biological Survey.

Held Thursday, November 9, 1911. Dr. A. S. Fisher, presiding.

Members present: Fisher, Lantz, Kalmbach, Birdseye, Wetmore,
Leak, Ward. Absent: Beal, Schoffer, Mcatee.

Dr. Fisher: Prof. Lantz, how did you finally come out with the County Clerks down in Kansas?

Prof. Lantz: I received reports from 65 of the 105 Counties, and I have now the returns of the bounty payments in Kansas from 1900 to 1911, except that about 40 reports for the last three years ^{are} still lacking. Most of them are very careful reports and indicate just about the same amount paid in bounties as in previous years.

Fisher: Are these in Counties that are badly infested?

Prof. Lantz: About the average. They are paying \$1.00 for coyotes, and the number killed has been steadily increasing until 1908, when it was probably the largest; since then it may have decreased slightly, but for the 105 counties the average bounty is \$25,000 a year during the 11 years for which I have returns.

Dr. Fisher: When you get back to Kansas it might be well to look into the coyote farms and see how they manage them.

Prof. Lantz: When I was in Kearny Co. (Kansas) in June a man brought in 16 ^{scalps of} coyotes; one was of an adult, and the 15 scalps of young were all the same size. He said he dug them all out of the same hole. I am satisfied that the coyote bounty has not decreased the numbers of coyotes. Many people bring in coyote scalps and claim that they are wolf scalps. Some counties will not recognize wolf scalps at all.

The crow bounty is looming up very large in Kansas, and also the gopher bounty in some counties. I have returns that show large payments at certain places. Crow bounties have been paid the last two or three years in some counties under a new law. I have made arrangements with one of the County Clerks to furnish us 50 stomachs a month from a crow roost in southern Kansas.

Dr. Fisher: We have only 33 stomachs from Kansas all told, so that it would be a valuable addition to get a good lot from there.

Prof. Lantz: I told him to send 50 stomachs per month as long as he could get them. The bounty is 5 cents, and 5 cents for the stomach ought to make it worth while to get them. When I was in Girard (Kansas) a dozen years ago they told me that boys who went out in numbers to the crow roost, could sometimes make \$20 apiece in a single night killing crows. They got 3 cents bounty, and also 3 cents a wing -- 6 cents for each crow -- from some millinery firm, making 9 cents for each bird. The place is a large plantation, 2 square miles, that is, 2 miles long and a mile wide, of hardy catalpa trees. Many of the trees have been cut down. They were planted 30 years ago, and whenever a tree is cut out it sends up sprouts that make the growth denser. Even when the leaves are off the trees it makes very good shelter for the crows, as hardly any wind goes through there.

Dr. Fisher: Have you heard anything interesting in regard to silver fox farming in the last week?

Prof. Lantz: Nothing, except that I have talked with the man in the Department here who is figuring on going into the business. He has advertised for animals for breeding purposes. He and his father-in-law have started a farm on Prince Edward Island, but have been handicapped in getting stock. The only stock offered is at \$6,000 a pair.

Dr. Fisher: Did you tell me that someone got a concession from the Government?

Prof. Lantz: Mr. Barnes of Kansas City, who has been wanting to go into the business of fox farming, has decided not to establish his fox farm in Maine as he originally intended. He expects to raise squabs to feed the foxes. He says he can get suitable land in Newfoundland at 10 cents per acre, and the food question is just as easily provided for there as in Maine. He has the consent of the Government to dig out young foxes during the summer, and can get them cheaper in this way than by paying \$6,000 a pair. He says that black and silver foxes are not uncommon in Newfoundland and that they are larger there than in Maine. He has \$25,000 to invest in the business and thinks the outlook there is better.

Dr. Fisher: Have you recently heard of any damage done to orchards by mice and rabbits?

Prof. Lantz: The other day I read of some damage to orchards in Washington. They recently killed 1,800 or 1,900 rabbits in one drive in that State.

I am now working on the paper on protection of fur animals.

A man in Newport, Pa. has 16 skunks for breeding purposes for sale, and another in Schwenksville that I have been figuring on visiting for some time, furnishes black skunks for breeding purposes.

Mr. Fisher: Mr. Wetmore, can you tell us something about fox farming in Alaska?

Mr. Wetmore: I might tell something about the blue and silver gray fox farming up in Alaska. In southwestern Alaska there was very little I could learn. The reports were contradictory and some of the information I got was unreliable. I found there were certain men engaged in fox farming in a crude way. One man held Unmak, an island about 40 miles long by 10 or 15 miles wide, which he used as a fox farm. He had it stocked with silver gray foxes and it was claimed that he had very good skins, but I did not see any of them. He is the only man I could learn of who appeared to be making any money in fox farming. The pass between Unmak and Unalaska is about 15 miles wide.

Mr. Fisher: What did he feed the foxes?

Mr. Wetmore: This man did not feed them, but a Mr. Carlson on Uyak did so. He catches cod for his foxes, and puts them in a big square box, in one end of which is a door that swings inward and on the other one that swings outward, and the foxes learn to go in at one door and out at the other. There are thousands of gulls in that country and in winter they are hard pressed for food, so it is necessary to protect the food provided for the foxes. If they took more pains in feeding the animals much better results would be had, as they can easily catch all the cod necessary to feed the foxes, but the people are rather shiftless and indifferent.

Mr. Brown of Sandpoint, Alaska, had 4 islands on which he held foxes. Chernaborn Island, on which he caught about 20 foxes a year, was the only one that brought returns. Chernaborn to the Eastward, another island, did not bring him anything. The way they farm foxes up there is to get a pair or two of foxes, turn them loose on some island, and call it a fox farm, then come back in two or three years and trap off a number of them. The country is sparsely settled and everybody knows who is moving up and down the coast, so it would be a difficult matter to peach without being discovered.

Mr. Chas. Rosenberg had Unimak stocked with red foxes, but he merely trapped off the increase every year. Unimak is a large island about 60 by 20 miles square, and is the first island to the west of the Alaska peninsula. False or Isanotski pass lies between Unimak and the mainland, but is not practicable for vessels of any size. Mr. Rosenberg has a series of camps with a trap line between them, and he goes from one to the other carrying his supplies on pack dogs; he makes these rounds all winter long.

Redden Duskini of Belkofsky had red foxes on Belgoi Island. I heard that he did very well but he would not give me any information himself. Red foxes do not bring

a very high price. They are worth \$6 or \$7, and he caught about 20 or 25 a year.

Mice and lemmings are very scarce, the only abundant mammal in that country of any size is the ground squirrel (Citellus). Some seasons there are a good many mice, but last season I set 80 or 90 traps a night and got very few Microtus. There are plenty of shrews, however.

The Alaska Commercial Co. has practically monopolized the fur trade in the islands. The company maintains a chain of stores there and the natives are afraid that if they sell the skins to outsiders the company will not sell them provisions in the winter time -- and I think their fear is well founded. One man told me that they kept the natives in debt all the time so as to keep them hunting.

This was formerly a center for otter hunting. The otters got on the rocks to keep out of the storm, and the natives go out at night with torches and club them to death, -- as high as 100 having been taken in one night. Two sea otter were seen off Deer Island while I was there, and the natives of Belkofsky got 2. One was picked up on the beach near Morzhovoi, and Mr. Applegate got 5 -- that I heard of. The natives make it a practice in spring to walk along the shore and watch for otter which were smothered under the ice.

Mr. Fisher:

Lampson disposed of something like 260 at the London sale this year, which is about 200 less than the average sales of the last 5 or 6 years.

Mr. Moore:

As an illustration of how afraid the natives are to trade with outsiders: Capt. Andersen told me that at Unga a number of years previous, 2 natives brought in 2 sea otter skins and wanted to sell them to the company, asking \$200 apiece for them. The skins were worth it, but the company offered them only \$150 for them and the men went away. Captain Andersen offered \$200 apiece for them, but the natives would not sell, but went back and sold them to the agents of the Company for \$150.

Prof. Lantz: The best ones sell for \$300 in London.

Belmore: Among the blue foxes caught every year were a certain number of white ones. They seem to run about 1 to 20. I saw white fox skins on Atka.

Second Council Meet.....()

Mr. Birdsall: During the past week I have finished up my Bitterroot report, covering a little over 100 typewritten pages, and I may index it so as to make it easier to find the different subjects. I have finished also my reports on the work we did in seed poisoning on the Cabinet National Forest this fall, which contains recommendations for the future poisoning of rodents.

I have started to write a Bitterroot Bulletin and in hunting for illustrations I find it is very difficult to find photographs that have been taken. If we had our photograph collection all in shape and card-indexed it would save many times the cost of the index. The same is true of notes that are in the files of Mr. Bailey's Division. There may be some notes in reports there that would be of great value in writing up the Bitterroot Valley Bulletin, but unless I spend a great deal of time in looking over these reports I cannot tell; but if they were indexed properly I could turn at once to whatever species I wanted.

Dr. Fisher: You have had not trouble in looking up notes on economic work.

Mr. Birdsall: I mean mammal reports that have come in from field collectors. I have to look through all the reports to find what I want.

Mr. Lentz: Up to 1907 all the economic reports of mammals have been kept out.

Mr. Kalmbach: I am working on the crow. I was out at the roost again last Sunday and found the crows roosting in a new place. Some interesting facts were noted. Contrary to the generally accepted belief that crows find secluded places for these sites, I found that the edge of the woods in which they roosted was within 150 feet of the Chevy Chase car track and some of the birds were on the very edge of the woods. Automobiles and cars were running past every few minutes without seeming to disturb the crows. I stayed there until all the crows were in. It was a bright moonlight night and I could see all that were coming, and was sure that all had arrived. The flight that I witnessed out across Connecticut Avenue at this point. Once in awhile the flight would be interrupted by the passage of a car and the birds would swing back and then fall in line again. The first ones in made a big rumpus for some time, but as darkness fell they gradually became more silent. Later in the evening, after sunset, I found individuals, or sometimes squads, suddenly

Second Comm. Meet.....(6)

rise up and fly in the directions from which these lines of flight came. It is amusing to hear the different tones of the birds in this assemblage. Some of these I would never attribute to the crow. One particular note I heard, and which was most frequently given when the bird was descending from a great height, sounded very much like that produced by a stick running along a picket fence -- a rattle. There were other notes very much like those of a cuckoo.

Dr. Fisher: Have you been able to approximate the area that they cover?

Mr. Balbach: I should say that the patch of woods in which they were this last time was about 10 or 15 acres. There are a few facts that can be learned very easily at this roost. In former years the numbers that were attributed to the old roosts were very large, running up into hundreds of thousands. As far as I can get reports, the roosts of today are smaller, and it would be a very interesting fact to know if the crow is breaking up into smaller roosts. The numbers could be easily counted, but the lines of flight are too numerous to be counted by one person.

Another interesting thing to be learned, that has a definite bearing on the economic status, is the distance that the crows fly from these roosts, and we can thus easily tell what territory the birds cover during the winter months. How far these birds up here go, I do not know. Some probably go to the eastern shore, that is, the shore of the Chesapeake. A few years ago there was published in the proceedings of the Delaware Valley Orn. Club a report on the crow roosts in the lower Delaware Valley, and much valuable information on the range of these birds was recorded.

Mr. Henshaw: How would you suggest ascertaining the distance covered?

Mr. Balbach: The report mentioned determined this by observations made by various people throughout this region. Of course it could be done in limited areas by postmasters and other people well informed. If it would not be possible to do that, it might be accomplished by first determining the average rate of speed at which these birds come into the roost, and, knowing the length of time it takes this line of flight to get into the roost, we might arrive at some conclusion.

Dr. Dearborn: The last week has been spent with the English sparrow traps and in beginning a revision of Farmers' Bulletin 383; In looking over the Bulletin to see what progress we have made since it was published in January, 1910, and where additions would be likely to be made, I found a few places that would need to be amended and added to.

In reference to the sparrow's good work with the weevils in Utah, it seems to me that it was to be anticipated under the circumstances. It strikes me as being an exceptional case, and merely illustrates what the sparrows will do when coincidents come right. Mr. Kalmback stated that there were more sparrows in the field where the alfalfa weevil was than there were in town, and that roofs of the farm buildings were thatched, which made ideal nesting conditions for the sparrow in the particular place where the alfalfa weevil subsequently appeared. The conditions were exceptional. The sparrows in town will not do much for the alfalfa weevil, and the coincidence of the sparrows and weevil being on the ground at the same time is not to be reckoned much in the sparrow's favor. It does not save sparrows in general from the condemnation they generally deserve.

The new trap of course will lengthen out the section in the bulletin relating to trapping quite materially. We have gotten the following results with the 2 new traps. They have been put out 6 days. Some days one would catch sparrows and the other would not. Only one day, and ^{that} was cold and wintry, we failed to catch sparrows altogether. The advantage is with the larger trap, although yesterday the smaller trap caught twice as many as the larger one. During the 6 days we have caught exactly 50 sparrows, the largest number in one day being 12 with the largest trap.

Last year in keeping sparrows in captivity, I was unsuccessful in an attempt to fatten them, and for awhile could not get them to hold their own. I found that by giving them a variety of food, different grains and bread, that I could keep them normal, but their weight was not increased. The amount of food they are capable of eating comes to about a quart of grain a day for 50 sparrows, so one can easily figure out how much damage a flock of 50 or 100 sparrows would do around a grain field. Two dozen of them would take care of a pint of grain a day. This is data which I had not gotten before, and do not know if anybody else has.

Dr. Henshaw: That is an important feature to be put in the bulletin.

Dr. Dearborn: I tried very hard last spring to get some sort of trap that would catch sparrows as they came to build their nests, that is, a nest trap, but I failed to trap them automatically. I made at least three different styles of automatic traps and a number of traps that were not made to work automatically but that could be

cleaned out easily. If the traps were on a tree they could be cleaned by dropping the bottom out. I put up 4 of these on my own grounds at home. The sparrows paid no particular attention to them. One day a bluebird went in. Two sparrows were sitting 2 or 3 feet away, and when the bluebird went away the sparrows went right in. I do not believe any sparrow went in until the bluebird did. At the time I left there were no signs of sparrows around the nesting box. I think afterwards, one box was occupied by sparrows but the other 3 were not. I have found only one style of trap that has been successful in catching sparrows. Yesterday Dr. Fisher received a letter from a man in Milwaukee showing plans of a trap in which he claims he caught a number of sparrows and I am going to write to him today to learn more about it.

In attempting to poison sparrows and watching them, I learned another thing. They have particular places in which they feed and also where they rest between meals. Last year there was a bunch in the garden in front of the main building, and I killed half a dozen of them with poison. After that I saw the sparrows in some shrubbery but did not see any more feeding in that particular place. On stormy days they came there to rest and preen themselves, but they fed elsewhere.

Dr. Fisher: At the suggestion of the Secretary we turned over plans and specifications of the sparrow trap to the Solicitor to have this trap patented, so that some energetic fellow will not steal the patent and then offer to sell us the right of using it.

Prof. Lantz: I noticed a good many years ago, during a 17-year locust invasion in Pennsylvania, most of the sparrows left the towns and went out in the country killing the insects. It was in June, and the young sparrows from the nests were all out there, and they abandoned everything else to kill the locusts.

Dr. Dearborn: It is a rule with the vast majority of birds that they will eat the thing most easily obtained.

Mr. Kalmbach: It is the prime factor that governs the birds' food.

Dr. Fisher: So it is with the mammals, and even with fish.

Dr. Dearborn: Whenever there is an insect outbreak you can depend on birds in general helping to suppress it.

Fisher: Just a few words on the work of Piper. He has been making tests in trapping to demonstrate how successful the poisoning operations have been.

In the Coconino Forest, Colorado, where we made 4 experiments, reports from the rangers show that there is a good stand of Douglas fir and lodge-pole pine, as well as yellow pine. We feared we would be unsuccessful in killing the mammals because the whole area was covered with fallen logs and the ripening strawberries reddened the ground, furnishing hiding places and food in abundance. Chipmunks and ground squirrels were seen in great numbers. After treating the area with poisoned cracklings, tallow-covered wheats, and starch-coated grain, Mr. Piper returned in 10 days and found little evidence of animal life there, and few, if any, strawberries were found on top of the logs where chipmunks or ground squirrels carry food to be eaten. A series of traps caught few chipmunks or white-footed mice, demonstrating the absence of these rodents. In this area lodge-pole pine and Douglas fir were planted, and the ranger reports a fine stand. The only partial failure we had was in one of the yellow pine areas which produced plenty of seedlings, but jays, nut-crackers, piñon jays and juncos did considerable damage to the young plants. When at the experiment station near San Francisco Mountain I saw a number of juncos try to get in the wire screen enclosure to feed on young pines just appearing above ground.

It is believed that the majority of the forestry men consider that planting of seedlings, rather than seed, is the proper way to reforest areas. The Secretary has great faith in the seeding method, consequently it is being thoroughly tested.

Before looking into this matter of tree growth, I had little idea of the vicissitudes a tree went through from the time it emerged from the seed until it reached a resistant height. The seeds are destroyed by mammals and seed-eating birds; the young plants by the same enemies; later, field mice and rabbits girdle them; when still larger, deer and cattle run them down, and when about 6 or 8 feet high, and danger from rodents is past, insects and fire are to be reckoned with. The timber tree has gone through many dangers, and probably is the survival of many thousands or hundreds of thousands of seeds.

Birdsall: In estimating the number of trees in one of the nurseries in the Cabinet Forest, we found that in one bed there were 1100 trees to the square foot -- which shows how thickly trees can be grown in nurseries. They can thus be raised and handled very cheaply.

Fisher: In our plans for next spring, I have arranged for grain at Coconino and Cochetopa Forests. The Pike Forest is so comparatively near Denver that I have postponed ordering for that forest until spring. Prof. Lantz has corresponded with the distill oil people at Denver and from what we have learned it is probable that we shall endeavor to substitute kerosene with Pintsch oil instead of carbon dis-

"Bird Life on the Aleutians."

By Alex Wetmore.

Topics:

1. Position, extent and general descriptive account of our new fifteen hundred mile long reservation in Alaska -- the Aleutian Islands.
2. Notes on the habits, actions and distribution of
 - (a) Sandwich sparrow
 - (b) Alaskan Longspur
 - (c) Aleutian Leucosticte
 - (d) Townsend's Snow Bunting
 - (e) Aleutian Wren
 - (f) Song Sparrow
 - (g) Ptarmigan
3. Remarks on a few others including the interesting wind blown straggler from Asia that find occasional refuge here.

.....(3)

"~~Bird~~Life on the Aleutians," -- Wetmore.....Cont.

Illustrations:

2 halftone plates, and text fig. (map).

The article will print from six to seven pages.

United States Department of Agriculture,
Office of the Secretary,
Washington, D. C.

AUTHORIZATION

No. 1887.

August 22, 1911.

Mr. Alex. Wetmore,
Agent.

(Thro. the Chief of the Bureau of Biological Survey.)

Sir:-

You are advised that Authorization No. 109, as amended by Authorization No. 1762, which permits you to perform travel in Alaska and various points on the Alaska Coast, for the purpose of gathering data on birds and mammals, is hereby still further amended so as to authorize you to return to Lawrence, Kansas, instead of Washington, D. C., your official station.

The amount that may be expended under Authorization No. 109, as amended, and which was drawn on the appropriation "General Expenses, Bureau of Biological Survey, 1912" [Food Habits of Birds and Mammals], is not hereby increased.

Wm. H. Hays

Acting Secretary.

D

A true copy

W. J. Nevins

Chief Clerk,
Div. of Reels and Disbursements.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY
WASHINGTON, D. C.

August 10, 1911

Mr. Alex Wetmore,
Bellingham, Washington.

Dear Mr. Wetmore:

I am enclosing herewith a permit to collect and ship from the Alaska Peninsula four large bears and six caribou as per my recent telegram.

The collection of birds obtained on your trip to the western islands is received and proves to contain some very interesting specimens. The series of ptarmigan are especially desirable and valuable. We shall look forward with great interest to the results of the ~~of the~~ work you are now engaged on.

I am enclosing herewith four transportation orders which are probably more than sufficient to transport you to Washington. I find that your original orders were made out with Washington as your official station, and it will be much better for you to come straight here and remain a week or ten days in order to talk your work over and get a distinct idea of the nature of the report required. Then it will be possible to give you a two months leave of absence without pay when you can go to Lawrence and complete your school work, afterwards coming back to Washington to complete your report.

Very truly yours,

H. H. Henshaw
Chief, Biological Survey.

United States Department of Agriculture,
Office of the Secretary,
Washington, D. C.

AUTHORIZATION

No. 1762.

August 10, 1911.

Mr. Alex. Wetmore,
Agent.

(Thro. the Chief of the Bureau of Biological Survey.)

Sir:-

You are advised that Authorization No. 109, which permits you to perform necessary travel in Alaska and various points on the Alaska coast for the purpose of gathering data on birds and mammals, is hereby so amended as to increase the amount that may be expended thereunder from \$300 to \$700, the increase being payable from the appropriation "General Expenses, Bureau of Biological Survey, 1912" (Food Habits of Birds and Mammals).

W. M. Hay
Acting Secretary.

D

A true copy:

W. J. Nevins

Chief Clerk,
Div. of Accts. and Disbursements.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY
WASHINGTON, D. C.

July 3, 1911.

Mr. Alex. Wetmore,
Unalaska, Alaska.

Dear Mr. Wetmore:

Your letter of June 9 in relation to your work is received. Disappointing as it is in many respects, I can see that you have done the very best work possible and that it is in no wise your fault that you have so little time to spend on the objects of the expedition. I have no doubt moreover that the results will fully justify sending you, though apparently they are by no means to equal our expectations.

I know how you must have felt on board ship when you saw a rare bird like Fisher's Petrel nearly within arms reach and yet be unable to secure a single specimen. Like you I have experimented in catching goonies but never succeeded in landing my bird on account of the speed at which the ship was going.

I told Merriam about the scarcity of *Microtus* on Unalaska together with an abundance of old sign, and he says this is quite characteristic of the islands. For some at present unknown reason, they disappear on a given island almost entirely, but later on resume their normal numbers. Possibly such fluctuations in numbers are due to epidemics, which it is well known prevail among many rodents, or it may be due to the periodic abundance of their enemies, like hawks and owls.

I doubt if I can add anything to my former letter of instructions but shall leave future work, in case you are disappointed in getting another trip to the westward, largely to your own discretion. Akoutan Island, Unga and the west end of the Peninsula offer good collecting grounds, and if you are stranded at Unalaska you can probably put in your time to advantage to the eastward. As I stated before I am sure that under any circumstances you will do the best you can and no one can possibly do more.

Mr. Bailey was taken with a sudden attack of pneumonia but recovered and has now left Washington to recuperate.

We are having an exceptionally hot summer and your account of daily snow and hail produced a favorable impression on me and makes me wish I were summering in your neighborhood. At present the temperature on the Avenue is about 106 in the shade.

Give my kind regards to Mr. Bent.

With best wishes for your continued health and for favorable success, I remain

Very truly yours,

H. W. Henshaw
Chief, Biological Survey.

United States Department of Agriculture,
Office of the Secretary,
Washington, D. C.

AUTHORIZATION

No. 109

July 1, 1911.

Mr. Alex Wetmore,
Agent.

(Thro. the Chief of Bureau of Biological Survey.)

Sir:

Authority is hereby granted you during the fiscal year 1912, under instructions from the Chief of the Bureau of Biological Survey, to perform necessary travel from your present location in Alaska to various points on the Alaskan coast and islands for the purpose of gathering data on the economic status and geographic distribution of the mammals and birds of that region.

You will be allowed the usual traveling expenses, including renting of camp equipment, and the purchase of supplies and specimens.

Upon the completion of this work you are directed to return to Washington, D. C., your official station.

Total expenditure under this letter must not exceed \$300, to be paid from the appropriation "General Expenses, Bureau of Biological Survey, 1912" (Food Habits of Birds and Mammals).

No expenses for freight charges must be incurred hereunder.

Willis L Moore

Acting Secretary.

A

A true copy:

W J Nevins

Chief Clerk,

Div. of Accts. and Disbursements.